

Chapter VI

Theory and Practice for Distance Education: A Heuristic Model for the Virtual Classroom

Charles E. Beck

University of Colorado at Colorado Springs, USA

Gary R. Schornack

University of Colorado at Denver, USA

Abstract

A new world of distance education demands new thinking. Key components to completing the distance educational system requires that institutions determine how the process is designed, delivered, integrated, and supported. Unfortunately, educational administrators tend to view distance education merely as a process of taking existing readings, exercises, handouts, and posting them to the Web. While this approach may seem cost effective, such an approach is not educationally effective. Although the meaningful

transition to e-education has just begun, determining measures of effectiveness and efficiency requires innovations in social and political thought beyond the advances in technology. The educational process requires feedback from the professor, from the student, and from the wider community, especially businesses who hire the graduates. As e-learning and higher education reach new heights, they are changing the functions of the university. E-learning changes all the ground rules, including time, distance, and pedagogy. We now have new ways to reach and interact with students, present rich content in courses, and deliver the technologies of the smart classroom to students, wherever they are in the world.

Introduction

Education is now the second largest civilian industry in the US after health care (Dunn, 2001). Distance education is a growth industry in the modern economy, with American's spending over one-half of one trillion dollars on it annually and with over two million classes taken by online education (Shea and Boser, 2001).

As a rapid growth industry, distance education provides a method for both educators and businesses to adjust to new market conditions. Implementing such programs may profit from a systems model for viewing all elements of the educational system. Our approach adapts systems theory to distance education: the systems-based Educational Process Model serves as a heuristic to examine recent research for insight into the distance education process. Using a value-added approach, we are applying the model categories to organize key practices identified from the research. Following the model's categories, we will prepare a list of best practices to help practitioners. Our discussion begins with an overview of the Educational Process Model. With this systems view, we then examine inputs into the system, including the objective educational resources and the subjective philosophy of education. The integration of the model includes purpose (objectives and audience), method (technology and methodology), and pedagogy. The outputs include the objective educational experience, itself, and the subjective outcomes. Assessment provides feedback to the system.

We presented our preliminary ideas at a state-wide conference in Teaching with Technology held in Boulder, Colorado, in June 2002, and at the international Conference of the World Association for Case Method Research (WACRA) in Mannheim, Germany, in July 2002. This chapter represents our most recent research into the new paradigm.

23 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage: www.igi-global.com/chapter/theory-practice-distance-education/8565

Related Content

Predicting Student Performance to Improve Academic Advising Using the Random Forest Algorithm

Mirna Nachoukiand Mahmoud Abou Naaj (2022). *International Journal of Distance Education Technologies* (pp. 1-17).

www.irma-international.org/article/predicting-student-performance-to-improve-academic-advising-using-the-random-forest-algorithm/296702

Research on English Classroom Teaching Programs in Colleges and Universities Based on Wireless Communication Technology Support in the Context of 5G

Min Zhang (2024). *International Journal of Information and Communication Technology Education* (pp. 1-17).

www.irma-international.org/article/research-on-english-classroom-teaching-programs-in-colleges-and-universities-based-on-wireless-communication-technology-support-in-the-context-of-5g/339202

A Procedure to Create a Pedagogic Conversational Agent in Secondary Physics and Chemistry Education

Diana Pérez-Marínand Antonio Boza (2013). *International Journal of Information and Communication Technology Education* (pp. 94-112).

www.irma-international.org/article/a-procedure-to-create-a-pedagogic-conversational-agent-in-secondary-physics-and-chemistry-education/99632

Information Technology Model Curricula Analysis

Anthony Scime (2002). *Challenges of Information Technology Education in the 21st Century* (pp. 222-239).

www.irma-international.org/chapter/information-technology-model-curricula-analysis/6538

Design and Implementation of C-iLearning: A Cloud-based Intelligent Learning System

Jun Xiao, Minjuan Wang, Lamei Wangand Xiaoxiao Zhu (2013). *International Journal of Distance Education Technologies* (pp. 79-97).

www.irma-international.org/article/design-and-implementation-of-c-ilearning/83517